

UNITED STATES NUCLEAR REGULATORY COMMISSION WASHINGTON, D.C. 20555

September 28, 1983

MEMORANDUM FOR DR. J. RAY, CHAIRMAN ADVISORY COMMITTEE ON REACTOR SAFEGUARDS

SUBJECT:

TAU EFFECT

On September 8, I asked the ACRS for its opinion on whether it was appropriate to use the "tau effect" at Diablo Canyon. Because there seems to be some residual uncertainty about what this question means, let me be more explicit:

I would like the Committee's evaluation of the application of the tau effect to reduce the response spectrum for the earthquakes used in the Diablo Canyon analysis. In particular, I would like to know whether the Committee believes the specific quantitative reductions applied to the Diablo Canyon spectrum are justified on the basis of scientific or engineering analysis. And if so, can the Committee provide me with such an analysis leading to the result employed at Diablo Canyon.

I realize that the Committee may want to supplement its discussion of the tau effect with a discussion of the overall seismic standard applied to the plant. However, I would like the tau effect analysis to be independent of any other factors that bear on the overall adequacy of the design.

Victor Gilinsky

cc: Chairman Palladino
Commissioner Roberts
Commissioner Asselstine
Commissioner Bernthal
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